

ABSTRACT

Apparatus and process for improved contaminant removal from engine lubricating oil are provided. The invention is adapted for use with an existing engine oil lubrication system and continuously processes a side stream that after
5 processing is returned to the engine oil. During processing, the oil is first filtered and then is deposited to form a thin film upon upper internal surface regions of a heated, generally conically configured platen whose average transverse internal diameter generally decreases with increasing downward distance from said upper internal surface regions. The platen internal surface regions preferably have a
10 plurality of slope changes. Oil so deposited on the platen internal surface regions forms a thin film that flows downwards and preferably experiences a variable flow rate and variable film thickness. Volatiles produced from the thin film are separated and vented preferably from a chamber over the platen, while oil consolidated from the thin film at the platen bottom is collected and recycled.

15